



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,295	03/12/2004	Scott F. Singer	04-225	8245
39310 7590 09/26/2007 MBHB/TRADING TECHNOLOGIES 300 SOUTH WACKER DRIVE SUITE 3200 CHICAGO, IL 60606			EXAMINER LIU, CHIA-YI	
			ART UNIT 3609	PAPER NUMBER
			MAIL DATE 09/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/800,295

Applicant(s)

SINGER ET AL.

Examiner

CHIA-YI LIU

Art Unit

3609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 7, 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kemp, II et al. (US 2002/0099644)

As per Claim 1

Kemp ('644) discloses,

dynamically displaying a first indicator in one of a plurality of locations in a bid display region, each location in the bid display region corresponding to a derivative of price value (round-up price) along a static value axis, the first indicator representing quantity (BidQ) associated with at least one order to buy the tradable object at the highest bid price currently available in the market, see Fig 7B. (Round up price = anything that has dependence on or relationship to price = derivative of price)

dynamically displaying a second indicator in one of a plurality of locations in an ask display region, each location in the ask display region corresponding to a derivative of price value (round-up price) along the static value axis, the second indicator representing quantity (AskQ) associated with at least one order to sell the commodity at the lowest ask price currently available in the market, see Fig 7B.

displaying the bid and ask display regions in relation to fixed derivative of price values positioned along the static value axis such that when the inside market changes, the derivative of price values along the static value axis do not move, see paragraph 0047, lines 1-3.

displaying an order entry region comprising a plurality of locations (trading cells) for receiving commands to send trade orders, each location corresponding to a derivative of price value along the static value axis, see paragraph 0085, lines 8-9, Fig 7B and column 0047, line 1.

at least one of the first and second indicators moves in the bid or ask display regions relative to the static value axis, see paragraph 0047, lines 3-6.

in response to a selection of a particular location of the order entry region by a single action of a user input device, see paragraph 0015, lines 5-6,14.

setting a plurality of parameters for a trade order relating to the tradable object and sending the trade order to the electronic exchange, see Abstract of Kemp, lines 2-3.

As per Claim 2

Kemp ('644) further discloses, displaying a numerical, graphical, or numerical and graphical representation of the derivative of price values along the common value axis, see Fig 7B.

As per Claim 7

Art Unit: 3609

Kemp ('644) further discloses the derivative of price values are updated at predetermined intervals, see paragraph 0039, lines 16-19.

As per Claim 9

Kemp ('644) further discloses the derivative of price values are updated in response to detecting a programmed event, paragraph 0039, lines 16-19.

As per Claim 10

Kemp ('644) further discloses displaying a plurality of bid and offer indicators in association with the derivative of price values, wherein each of the bid indicators represents a quantity (BidQ) available to buy the tradable object and each of the offer indicators represents a quantity (AskQ) available to sell the tradable object, see Fig. 7B.

As per Claim 11

Kemp ('644) further discloses consolidating the derivative of price values on the static value axis such that groups of two or more values are combined into consolidated value levels, see paragraph 0018, lines 2-3.

consolidating the display of the plurality of bid and offer indicators into a plurality of consolidated bid and offer indicators so that each consolidated bid and offer indicator represents quantity associated with a the two or more values within a consolidated value level, see Claim 1 of Kemp, lines 4-13.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3609

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-6, 12-15, 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp, II et al. (US 2002/0099644) in view of Kane (US 6,317,728)

As per Claim 3

Kemp ('644) does not specifically disclose each of the derivatives of price values are based through a common relationship on a different price.

Kane ('728) teaches each of the derivative of price (Delta) values are based through a common relationship on a different price, see Fig 19. (Delta = change in price. Each delta value is based on a different price through common relationship)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include a common relationship based on different price.

One of ordinary skill in the art would be motivated to do so for the benefit of comparing pieces of price information.

As per Claim 4

Kemp ('644) further discloses the common relationship is input through a graphical user interface, see paragraph 0014, lines 1-3 and Fig 7B.

As per Claim 5

Art Unit: 3609

Kemp ('644) does not specifically disclose the derivative of price values comprises a net change and that the common relationship comprises $\text{Net change} = (\text{Value(s) at Current Point}) - (\text{Value(s) at Reference Point})$.

Kane ('728) teaches the derivative of price values comprise a net change (Delta). The common relationship comprises $\text{Net change} = (\text{Value(s) at Current Point}) - (\text{Value(s) at Reference Point})$, see Fig 19. (Delta = price change between two points of time = current value – previous value)

(According to applicant's Specification, "Net change" = difference in value between two points in time, which includes the net change of price or a change in any other measurement and that Reference point = one or more values at an earlier point of time)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include a net change.

One of ordinary skill in the art would be motivated to do so for the benefit of presenting one more market information for comparison.

As per Claim 6

Kemp ('644) does not specifically disclose the derivative of price values comprise yield, profit and loss, volatility, or momentum indicators,

Kane ('728) teaches volatility, see Fig 19 (High/Low/Delta = volatility) and Fig 20.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include volatility.

Art Unit: 3609

One of ordinary skill in the art would be motivated to do so for the benefit of presenting one more market information for comparison.

As per Claim 12

Kemp ('644) does not specifically disclose displaying a second set of values along the static value axis, wherein each of the second set of values corresponds to each of the derivative of price values on the value axis.

Kane ('728) teaches displaying a second set of values (Delta) along the static value axis, wherein each of the second set of values corresponds to each of the derivative of price values (High/Low) on the value axis, see Fig 19.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include a second set of values correspond to each of derivative of price values.

One of ordinary skill in the art would be motivated to do so for the benefit of grouping and comparing sets of values.

As per Claim 13

Kemp ('644) does not specifically disclose each of the second set of values represents a price.

Kane ('728) teaches each of the second set of values (Delta) represents a price, see Fig 19.

Art Unit: 3609

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include each of the second set of values represent a price.

One of ordinary skill in the art would be motivated to do so for the benefit of presenting another price information for comparison.

As per Claim 14

Kemp ('644) does not specifically disclose each of the second set of values represents a different derivative of a price.

Kane ('728) teaches each of the second set of values (Delta) represents a different derivative of a price, see Fig 19. (Derivative of price = anything that has dependence on or relationship to price. Delta = change in price)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include each of the second set of values represent a different derivative of price.

One of ordinary skill in the art would be motivated to do so for the benefit of presenting another price information for comparison.

As per Claim 15

Kemp ('644) discloses,

dynamically displaying a first indicator (BidQ) in a location in a bid display region, the location in the bid display region corresponding to one of the plurality of price

derivative (Round-up-price) values, see Fig 7B. (Round-up-price has dependence on or relationship to price = derivative of price)

the first indicator representing quantity (BidQ) associated with at least one order to buy the tradable object at the highest bid price currently available in the market, see Fig 7B. (Quantity at highest bid price= 108)

dynamically displaying a second indicator (AskQ) in a location in an ask display region, the location in the ask display region corresponding to one of the plurality of price derivative values, see Fig 7B.

the second indicator representing quantity (AskQ) associated with at least one order to sell the tradable object at the lowest ask price currently available in the market, see Fig 7B. (Quantity at lowest ask price= 206)

Kemp ('644) does not specifically disclose calculating a plurality of price derivative values, wherein each of the plurality of price derivative values represents a change between a first number at a first point in time and at a second number at a second point in time.

Kane ('728) teaches calculating a plurality of price derivative values, wherein each represents a change between a first number at a first point in time and at a second number at a second point in time, see Fig 19. (Both Trend and Delta are about price change between two points of time)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include calculating a plurality of price derivative values, each represent a change between a first number at a first point in time and a second number at a second point in time.

Art Unit: 3609

One of ordinary skill in the art would be motivated to do so for the benefit of comparing price spread.

As per Claim 22

Kemp ('644) further discloses the plurality of price derivative values in the bid and ask display regions are positioned along a static value axis, see Fig 7B.

As per Claim 23

Kemp ('644) further discloses the bid and ask display regions are displayed in relation to fixed derivative of price values positioned along the static value axis such that when the inside market changes, the derivative of price values along the static value axis do not move and at least one of the first and second indicators moves in the bid or ask display regions relative to the static value axis, column 0047, lines 1-6 and Fig 7B.

As per Claim 24

Kemp ('644) further discloses receiving a recentering command to approximately center the first and second indicators in the bid and ask display regions, see paragraph 0050, lines 6-9.

As per Claim 25

Kemp ('644) further discloses derivative of price values are along the static value axis, see Fig 7B and column 0047, line 1.

Art Unit: 3609

displaying an order entry region comprising a plurality of locations (trading cells) for receiving commands to send trade orders (enter an order), each location corresponding to a derivative of price, see paragraph 0085, lines 8-11 and Fig 5.

in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters (restrictions/elements) for a trade order relating to the tradable object and sending the trade order to the electronic exchange, see paragraph 0007, lines 1-3, 8-10 and paragraph 0015, lines 5-6 and 13-16.

As per Claim 26

Kemp ('644) does not specifically disclose the plurality of price derivative values are represented by numbers.

Kane ('728) teaches the plurality of price derivative values are represented by numbers, see Fig 19 (Delta).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include the plurality of price derivative values are represented by numbers.

One of ordinary skill in the art would be motivated to do so for the benefit of comparing data.

As per Claim 27

Kemp ('644) does not specifically disclose the plurality of price derivative values are represented graphically.

Art Unit: 3609

Kane ('728) teaches the plurality of price derivative (Trend) values are represented graphically, see Fig 19.

(Graphical form = shapes, colors, or any other graphic to represent price derivatives. Generated value do not need to be displaced so long as market info is displayed in relation to derivative of price value) ("UP" and "DOWN" could easily be represented with arrows = graphic form)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include the plurality of price derivative values are represented graphically.

One of ordinary skill in the art would be motivated to do so for the benefit of creating alternative way of presenting and comparing data.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp, II et al. (US 2002/0099644) in view of Barclay (US 6,850,555)

As per Claim 8

Kemp ('644) does not specifically disclose displaying a region for receiving a command to update the derivative of price values, wherein the derivative of price values are updated in response to a selection of the region with a user input device.

Barclay ('555) teaches price updated in response to user input, see Claim 31, lines 53-57.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include price updated in response to user input.

Art Unit: 3609

One of ordinary skill in the art would be motivated to do so for the benefit of changing price manually.

Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp, II et al. (US 2002/0099644) in view of Kane (US 6,317,728) and further in view of Wolfberg et al. (4,885,685)

As per Claim 16

Kemp ('644) does not specifically disclose the first number represents a particular value of interest and the first point in time represents a designated time of interest.

Wolfberg ('685) teaches the first number (current amount) represents a particular value of interest and the first point in time represents a designated time (current) of interest, see column 22, lines 26-28.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include the first number represents a particular value of interest and the first point in time represents a designated time of interest.

One of ordinary skill in the art would be motivated to do so for the benefit of comparing price spread.

As per Claim 19

Kemp ('644) does not specifically disclose the second number represents a second particular value of interest and the second point in time represents a second designated time of interest.

Art Unit: 3609

Wolfberg ('685) teaches the second number (previous months amount) represents a second particular value of interest and the second point in time represents a second designated time (previous month) of interest, see column 22, lines 26-28.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include the first number represents a particular value of interest and the first point in time represents a designated time of interest.

One of ordinary skill in the art would be motivated to do so for the benefit of comparing price spread.

As per Claim 17

the first number represents a last traded price, a settlement price, a last bid price, a last ask price, a yield value, or a profit and loss value, see Table 1 (Last Price)

As per Claim 18

Kemp ('644) further discloses the particular value of interest is input through a graphical user interface, see paragraph 0014, lines 1-3 and Fig 7B.

As per Claim 20

the second number represents a last traded price, a settlement price, a last bid price, a last ask price, a yield value, or a profit and loss value, see Table 1 (Bid Price)

As per Claim 21

Kemp ('644) further discloses the second particular value of interest is input through a graphical user interface, see paragraph 0014, lines 1-3 and Fig 7B.

Art Unit: 3609


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIA-YI LIU whose telephone number is (571) 270-1573. The examiner can normally be reached on Mon-Thur alternating Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TOM DIXON can be reached on (571) 272-6803. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CHIA-YI LIU
Examiner
Art Unit 3609


THOMAS A. DIXON
SUPERVISORY PATENT EXAMINER